

King's Christian Collegiate Model United Nations

United Nations Office for Outer Space Affairs
(UNOOSA)



Delegate Guide

Arianna Mastrolonardo
February 25-26, 2022

Dear Distinguished Delegates,

It is my honour to welcome you to the eighth annual King'sMUN Conference: Voices of the Voiceless. Since the debut of the King'sMUN conference in 2013, we have striven to create a conference that enables students to push past their comfort zones, connect with their peers, and learn more about the world around them.

Model United Nations (MUN) is a youth simulation of the United Nations where students have the chance to debate the world's greatest issues, problem-solve, and produce creative resolutions with their peers. Throughout my MUN journey I have developed my critical thinking, teamwork, leadership, and communication skills, which have transferred into many different avenues of my life and which I attribute to many of my successes in high school.

We are living in a time where certain people groups are marginalized and discriminated against based on prejudice and unjust systems. At King'sMUN we strive to lift the songs of those who are oppressed and listen to the stories and experiences of those whose mouths have been sealed for far too long. This year, the theme of the King'sMUN conference is Voices of the Voiceless. I hope you take this to heart both during the conference and as you move forward into your future.

These past few years have, without a doubt, been ones of hardship and challenge. The COVID-19 Pandemic has built many barriers not only between countries, but within countries, communities and families. At King'sMUN we acknowledge the past to live actively in the present, but look to the future with hope. One thing the COVID-19 Pandemic has not taken away is our creativity and will to connect to one another. With a range of committees branching from tutorial to advanced, and real to fictional, delegates with all levels of experience have an opportunity to collaborate with peers and grow as young leaders and changemakers at King'sMUN, despite the current predicaments.

Once again, I am extremely excited to greet each and every one of you at the eighth annual King'sMUN conference. Myself and the King'sMUN Secretariat look forward to seeing you on Friday, February 25th and Saturday, February 26th, 2022.

Sincerely,

Arianna Mastrolonardo

Secretary-General, 2022

King'sMUN

Introduction

The United Nations Office for Outer Space Affairs (UNOOSA) was formed on the basis of space law. Space law is simply the law in charge of space-related activities and includes international treaties, agreements, conventions, UN General Assembly resolutions, and the rules/regulations of other international organizations. To get a better understanding of space law, the five international treaties and five principles governing outer space must be studied (UNOOSA, n.d.).

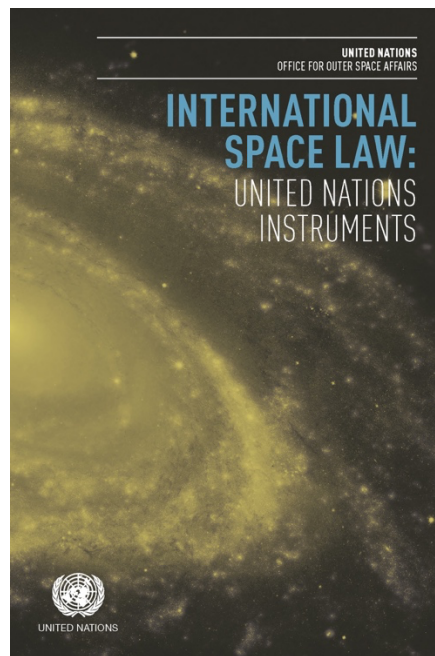


Figure 1: The cover to the compilation booklet of International Space Law which includes the treaties and principles (UNOOSA, n.d.).

The five international treaties on outer space include:

1. The Outer Space Treaty (i.e., a treaty on the principles governing activities of states exploring or using celestial bodies).
2. The Rescue Agreement (i.e., a treaty on the rescue and return of astronauts and objects).
3. The Liability Convention (i.e., a treaty on liability for damage caused by space objects).
4. The Registration Convention (i.e., a treaty on the registration of objects beings launched into space).
5. The Moon Agreement (i.e., a treaty on governing states' activities on celestial bodies).

The five principles on outer space include:

1. The Declaration of Legal Principles (i.e., principles focusing on governing the activities of states exploring outer space).
2. The Broadcasting Principles (i.e., principles focusing on governing states' use of artificial earth satellites).
3. The Remote Sensing Principles (i.e., principles covering the remote sensing of Earth from Space).
4. The Nuclear Power Sources Principles (i.e., principles surrounding the use of nuclear power in space).
5. The Benefits Declaration (i.e., principles covering international cooperation in using space in the interest of all states, especially in listening to the needs of developing countries) (UNOOSA, n.d.).

Topic 1: The Issue of Space Tourism

Background Info

Space Tourism is simply described as recreational space travel. It can be done through private companies or governments. Although the first “space tourist” officially flew in 2001, now more than ever space tourism has become very popular with an increase in these opportunities for orbital and suborbital tourism. This sudden spike in popularity in 2021 has also caused much concern within individuals and the wider global community (Seedhouse, 2021).



Figure 2: Jeff Bezos, owner of the space tourism company Blue Origin posing with his crewmates (LA Times, 2021).

To start there is much worry about the safety of individuals going into space. This is especially increased given the unknown nature and mystery associated with outer space, but looking beyond this, there is much concern within the global community for multiple reasons. One of the biggest reasons is the environmental impact that space tourism may have.

In this past year, three major space crafts launched: Sir Richard Branson's Virgin Galactic VSS Unity spaceplane, Jeff Bezos' Blue Origin rocket, and Elon Musk's SpaceX. The former had a hydrogen propellant made of carbon-based fuel, hydroxyl-terminated polybutadiene, and nitrous oxide, while Bezos' was powered using liquid hydrogen and liquid oxygen propellants, and Musk's utilized liquid kerosene and liquid oxygen. However, although burning the propellants gave these spacecrafts energy, it also generated greenhouse gases and air pollutants. Two-thirds of the propellant exhaust from these vehicles will be released in the stratosphere and mesosphere, where they could remain for 2-3 years. Additionally, during the launch and re-entry phases of space travel, the high temperatures convert nitrogen into nitrogen oxides which negatively impact the environment. For example, nitrogen oxides work alongside chemicals to deplete the ozone layer. Reducing the ozone layer is very risky as this layer protects Earth against deadly UV radiation. In addition to this, the CO₂ emissions and soot contribute to global warming by trapping heat in the atmosphere. This is something to keep in mind when considering the expansion of space tourism. It is suspected that the CO₂ emissions produced by 4 tourists during a space flight will be about 50-100 times greater than the 1-3 tonnes of emissions created per passenger on a long airplane ride (Marais, 2021).

Related Sustainable Development Goals

In 2015 the United Nations developed a set of 17 goals for the global community to achieve by 2030: the Sustainable Development Goals (SDGs). There are numerous SDGs that are related to space tourism, however one that is especially prevalent is SDG 13: Climate Action. The mandate of this global goal is to, "take urgent action to combat climate change and its impacts." Currently, there are a lot of uncertainties surrounding space tourism and the impact on the environment, but the carbon footprint of space tourism is suspected to be enormous due to the large number of air pollutants and greenhouse gases generated. Target 13.2 suggests that we, "Integrate climate change measures into national policies, strategies, and planning." Perhaps in

the future if space tourism is to proceed forward, additional research and measures must be in place to reduce the negative impact on the environment and climate change that space tourism could potentially have.



Figure 3: The logo for SDG 13 (United Nations, n.d.).

Questions to Consider

1. What are the positives and negatives of space tourism?
2. What other factors besides a negative impact to the environment might there be as a result of space tourism?
3. What must be done to reduce the environmental impact of space tourism?

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Topic 2: Access to New Technologies in Space Exploration

Background Info

Although there has been exponential growth in the development of spacecraft, understanding of the universe, and innovative new technologies to be used in space exploration in many countries around the world, the same cannot be said for all countries. Beyond simply exploring space, space technologies have been invaluable in fighting poverty, preventing environmental degradation, and considering the dwindling supply of natural resources. Many developing countries have expressed hope that developed nations would make a larger commitment to sharing their knowledge of space technology with others. If developed nations were to do that, there is much hope that the world would be able to reach the Sustainable Development Goals with these improvements in developing nations. In the past, the People's Republic of China has been a leader in harbouring cooperation between developed and developing countries in space technology (General Assembly, 1997).

As mentioned previously in the guide, one of the five guiding principles in space law directly relates to this topic: The Benefits Declaration. This declaration focuses on ensuring cooperation between states in the exploration of outer space and taking into account the needs of developing countries. The fifth operative clause of the resolution produced sets out 3 main goals to consider when considering the needs of developing countries such as technical assistance and effective distribution of both financial and technical resources. The three goals are to: (1) Promote the development of science, technology, and its applications, (2) Assist in the development of relevant space technologies and abilities in States, and (3) Exchange knowledge, skill, and technology between States on a mutually acceptable basis (General Assembly, 1982).



Figure 4: The People's Republic of China has worked to improve accessibility to space for developing countries and is seen above assembling their second space station (Nowakowski, n.d.).

Related Sustainable Development Goals

Just as there was a surplus of SDGs related to Space Tourism, the same can be said about access to new technologies in space exploration. However, one specific SDG that plays a huge role in this issue is SDG 9: Industry, Innovation, and Infrastructure. The mandate of this SDG is to, “Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.” It is vital that, as progress is made in developing new technology to utilize in space travel, developing nations have access to this technology and additional resources as necessary. Target 9.5 of the SDGs directly relates to this as it strives to, “Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing of research and development workers per 1 million people and public and private research and development spreading” (United Nations, n.d.).



Figure 5: The logo for SDG 9 (United Nations, n.d.).

Questions to Consider

1. Is your assigned country in need of access to new technologies used in space?
2. What can be done to share information and cooperate peacefully between nations?
3. How can developed countries further assist developing countries beyond merely providing access to new technologies (think provision of resources, education, etc.)?

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